

three species of some interest by reason of their rarity or not having them hitherto reported from that country. They are as follows :

Sagona ovata Brunn. One ♀. Described from Costa Rica and since reported from Guatemala. This specimen from Presidio is, I believe, the first record of its being found in Mexico.

Pyrgocorypha rogersi Sauss. & Pictet. One ♀. Described from Costa Rica and not before recorded from Mexico.

Encoptolophus herbaceus Bruner. One ♀. This handsome little grasshopper was described from central Mexico but has not been reported since. It was found in moderate numbers by its describer in fields about the outskirts of Mexico City.

SOME NEW AUSTRALIAN CHALCID-FLIES, MOSTLY OF THE FAMILY ENCYRTIDÆ

(Hymenoptera)

By A. A. GIRAULT

Genus COCCOPHAGUS Westwood

Coccophagus ashmeadi Girault, *perseus*, new variety.

Female.—In the analysis of the Australian species runs to *ashmeadi* from which it differs in that the club joints are subequal to funicle 3 and not longer as in *nigriventris*. The pronotum is very slightly dusky, if at all.

Two females (G. Compere).

Habitat, Swan River, West Australia.

Types, Cat. No. 20683, U. S. Nat. Mus.

Coccophagus emersoni, new species.

Female.—Length, 1 mm. Black, the wings hyaline, the scape and legs golden except proximal four-fifths of the hind coxa; the following parts orange: Head, except a line between the lateral ocelli and most of the occiput; scutum, except the cephalic fourth; parapsides, except a small spot cephalo-mesad a little cephalad of middle; and scutellum, except at base mesad (a small area). Stature of *triguttatus*. Most of propleurum

and a roundish area below the tegula, yellow. Club distinct but not much wider than the funicle; funicle 3 a little longer than wide, 1 nearly twice longer than wide; pedicel barely as long as funicle 3, subequal to club 2; all club joints wider than long. Flagellum (except the pedicel) longitudinally striate. Mandibles subtruncate, but three weak, obtuse teeth indicated.

Three females in the collection of the U. S. National Museum.

Habitat, Perth, West Australia.

Types, Cat. No. 20684, U. S. Nat. Mus., three females on tags with a slide bearing a head.

Coccophagus australiensis, new species.

Female.—Length, 1.25 mm. Agrees with the description of *lunulatus* Howard but the scutellum does not always bear the black area at apex and funicle 1 is a little longer than the pedicel; scutum and scutellum with rather dense, close, yellowish pubescence. The male, apparently, has no yellow on the body.

From four females in the U. S. National Museum (G. Compere, 766).

Habitat, Swan River, Australia.

Types, Cat. No. 20685, U. S. Nat. Mus., two females on tags.

Cotypes in the Queensland Museum, a female on a tag.

Here is another one of those puzzling species, so similar to a species of another region yet with slight differences and probably wholly distinct as to origin. The species is founded on the supposition that it is an aboriginal of Australia. Hence, if so, rooted in a stock wholly remote from that of *lunulatus*. Later I found that the Australian species differs in having the scutellum hairy.

Genus ABLERUS Howard

Ablerus emersoni, new species.

Female.—Length, 0.75 mm., excluding the ovipositor, which is extruded for a length equal to a fourth or more that of the abdomen and is white at tip (the valves, that is).

In the analysis of species runs to *poincarei*, differing in that the ovipositor valves are white at tip, the cross-stripe of the fore wing is obliqued a little disto-caudad and is from between the stigmal and marginal veins. Marginal fringes of the fore wing about a fourth of the greatest wing width. Funicles 1, 2, and 4 subequal. Fore and middle tibiæ white except just beneath the knee. Funicle and club wholly brown.

From five females in the U. S. National Museum (G. Compere).

Habitat, Perth, West Australia.

Types, Cat. No. 20686, U. S. Nat. Mus., the above specimens on a slide.

***Ablerus impunctatipennis*, new species.**

Female.—Length, 0.50 mm., excluding the ovipositor, which is extruded for a length equal to nearly a third that of the abdomen and the valves are white at tip.

In the analysis runs to group III but differs in having the fore wing entirely brown with the exception of a moderately large, round, hyaline spot on the stigmal vein and a smaller spot on the base of the marginal vein. Dark metallic green; apex of pedicel, funicle 4, knees and tips of tibiæ and the tarsi except the last joint, silvery white. Longest marginal cilia of the fore wing about a third of the greatest wing width. Caudal wings with sparse discal cilia. Funicles 1 and 2 subequal, each a half longer than wide, 3 short, 4 shorter and a little shorter than 1. A naked path nearly across fore wing from the hyaline stigmal spot, the cilia denser proximad of this. (Color of head not seen.)

Two females in the collections of the U. S. National Museum (G. Compere).

Habitat, Perth, West Australia.

Types, Cat. No. 20687, U. S. Nat. Mus., the above specimens on a slide.

***Ablerus marchali* (Howard).**

Erroneously recorded from Sydney from a male specimen which I have compared with the type.

Genus MARIETTA Motschulsky

Marietta maculatipes, new species.

Female.—Length, 0.60 mm. Orange yellow, the wings hyaline (or subhyaline at base), the legs silvery white, the tibiæ with two dusky bands (incomplete ventrad) equally distributed, the first at apex of basal third, the second at about base of distal third. Caudal margin of abdominal segments dusky. Fore wings with about nine lines of somewhat coarser discal cilia proximad of the hairless line and a small patch farther proximad. Funicle joints annular, subequal; club 1 a little longer than wide, not quite half the length of the club. Cephalic legs immaculate.

Male.—The same but the fore wings bear only about six lines of discal cilia proximad of the hairless line, the body is smaller and the antennæ only 4-jointed, the club long, *solid*, five times longer than wide, the funicle joint a little wider than long and rather closely united with the club.

From five males, six females (G. Compere).

Habitat, Perth, West Australia.

Types, Cat. No. 20688, U. S. Nat. Mus., four males, six females on a slide.

Marietta novicapillata, new species.

Female.—Similar to *capillata* but the distal infuscation of the fore wing, usually isolated in that species, is here extended proximad around the caudal and cephalic margins, on the latter more than halfway to the venation (still farther on the opposite margin). Thus, this area is connected with the broken oblique line from stigmal vein as well as with the two isolated marginal areas (one caudad, the other cephalad) and is considerably larger than in the other species.

From five females on a slide (G. Compere).

Habitat, Perth, West Australia.

Types, Cat. No. 20689, U. S. Nat. Mus., the fore described specimens.

Aphelinus: *perissoptroides*, *ligeratus* and *inexplicabilis* belong here, doubtless. The genus may be known by the pat-

terned wings but differs from *Aphelinus* essentially in secondary sexual characters only (see *maculatipes*, above).

***Eupelmus cerambycoboideus*, new species.**

Female.—Length, 4 mm., the ovipositor valves white, just tipping the abdomen. Dark metallic green, the legs red except the first and last coxæ, the forewings hyaline yet with a distinct rectangular (longer cephalo-caudad) fuscous marking from about the distal two-thirds of the postmarginal vein and extending halfway across the wing. Venation yellowish. Scape with a distinct foliaceous expansion ventrad which though rather great is not much convexed; pedicel about two and a half times longer than wide at apex, a little longer than funicle 2; funicle 1 slightly longer than wide, 2 and 3 longest, each about two and a half times longer than wide, 4 a little shorter, 8 wider than long. Caudal tibial spurs double, stout, unequal. Postmarginal vein much longer than the long stigmal. Lower face and occiput with short silvery pubescence, the antennæ inserted on a level with the lower end of the eyes. Body densely, finely scaly. Axillæ moderately widely separated. Raised mesal cephalic area of scutum distinct, extending beyond the middle (its apex being drawn out into a carina); the lateral ridges join across before distal margin. Abdomen eupelmiform but rather depressed, as long as the rest of the body, the second segment rather deeply excised at caudal margin mesad, the others hardly so. Frons moderately wide. Teeth of middle tarsi black.

One female taken by Albert Koebele, in the collections of the U. S. National Museum.

Habitat, Sydney, New South Wales.

Type, Cat. No. 20690, U. S. Nat. Mus., the female on a card, a fore wing, antenna, and caudal leg on a slide.

***Coccophoctonus dactylopii* Ashmead.**

The types are labeled Honolulu, Hawaii; and are not of Australia as has been recorded.

***Ænasiella australia*, new species.**

Female.—Length, 1.75 mm., the ovipositor not extruded.

Differs from the description of the genotype as follows: *The marginal vein is a half longer than wide*, about half the length of the postmarginal, the latter three-fourths the length of the stigmal; the legs are concolorous except the tarsi, knees narrowly, nearly the distal half of the first tibiæ, tips of hind tibiæ and the middle legs except lightly the middle of the femora broadly (washed) and a distinct cinctus on the tibia at proximal fourth; funicles 1-4 subequal, each slightly longer than wide. Otherwise the same. Scutum and scutellum with scattered punctures.

Male similar but the wings hyaline and the antennæ brown yellow, the club darker, the dorsal edge of the scape and the pedicel above, metallic. Pedicel hemispherical, small, the scape compressed; club ovate, not long, larger than any funicle joint; funicle 1 a half longer than wide, 6 much wider than long, 3 a little longer than wide. Clothing of antennæ minute, dense. The frons is broad (male).

Two males, many females, reared from a brachyscelid gall on gum (A. Koebele).

Habitat, Sydney, New South Wales.

Types, Cat. No. 20691, U. S. Nat. Mus., four females on tags plus a slide bearing a head of each sex and a female fore wing.

Anastatus thoreauini, new species.

Female.—Similar to *nonexcisus* Girault but the two eye-spots of the fore wing are larger, the knees, tips of tibiæ and the tarsi reddish brown while the thorax laterad is suffused with reddish.

One female, Toowoomba, Queensland (A. Koebele).

Type, Cat. No. 20692, U. S. Nat. Mus., the specimen on a tag; wings, antenna, and hind legs on a slide.

Anastatus saintpierrei, new species.

Female.—Length, 3 mm., excluding the ovipositor which is extruded for a length nearly equal to that of the abdomen. Like *bombax* but differs in that the ovipositor is much longer, the valves wholly brownish black, the hyaline stripe on the fore

wing is no longer than the first (complete) cross-stripe; and the mesal part of the scutum bears white pubescence which is scattered; also, the scutellum is plane (a variable character). The raised triangle (cephalad) of the scutum is half the length of that part and scaly, not wavy-lined like the scutellum. Pronotum reddish (not metallic).

Many females in the U. S. National Museum (G. Compere).
Habitat, Perth, West Australia.

Types, Cat. No. 20693, U. S. Nat. Mus., two females on a tag; an abdomen, antenna, and fore wing on a slide.

Anastatus borrowi, new name.

For *A. splendidus*, in Memoirs Queensland Museum, IV, p. 20, preoccupied.

Genus MESEUSANDALUM Girault

A synonym of *Eusandalum*. The parapsidal furrows are *complete*, very narrow, joining before the middle of the scutum (exceptional for the whole subfamily, *teste* North American and European specimens).

Leptomastix australia, new species.

Fcmale.—Length, 1.50 mm. Dark metallic purple, the proximal joint of the middle tarsus white. Resembling closely *trifasciatus* but the fore wing pattern differs in that there are but two fasciæ, the first and second being joined rather narrowly along the caudal margin of the blade. Thus the following wing pattern: A hyaline, longer than wide and hairy stripe at base, a rather narrow fuscous stripe much narrower than the second fuscous stripe and joined to it as noted; a triangular hyaline, naked area of rather large size between fuscous stripes 1 and 2, its next longest side against the submarginal vein; a second fuscous stripe over thrice the length of the first, broadening caudad, including the hairless line and extending from distal submarginal, marginal and all of postmarginal veins; a rather narrow, curved naked hyaline stripe, its convexity proximad, its proximal margin tipping apex of postmarginal and stigmal veins; a third fuscous stripe, much longer than the second

and through the naked hyaline distal margin. Discal cilia from base to fuscous stripe 1 coarser than that distad. Marginal vein over twice longer than wide, subequal to the postmarginal, the stigmal a half shorter nearly. Axillæ separated by a very short carina. Hind tibial spurs double. Head longer than wide, lenticular, the cheeks a little over half the length of the eyes. Club a little longer than funicle 1 which is about twice the length of 6, thrice longer than wide. Pedicel about as long as funicle 6.

From one female captured by sweeping native trees in a park at Muswellbrook, New South Wales, October 26, 1914.

Type in the Queensland Museum, a female on a tag, the head, fore wing, and a hind leg on a slide.

Pleistodontes nigriventris (Girault).

Transferred from *Agaon*. The species, through an error, was twice described as new. First as an *Agaon*; it was then transferred, upon re-examination, to its proper genus and described again; the first description was not known then to have been published, I being at a distance and having requested its withdrawal.

Miscogaster australia, new species.

Female.—Length 1.20 mm. Dark metallic purple, the wings hyaline, the legs and venation yellowish brown except the coxæ and proximal two-thirds of cephalic femur. Coarsely, uniformly scaly, the propodeum, petiole, and segment 2 of abdomen subglabrous, rest of abdomen delicately scaly. Face glabrous, but crosslined between the clypeus (itself glabrous but with obscure punctures), ventral ends of the eyes and the antennæ; also the cheeks lined, the vertex scaly. Scutum with two irregular rows of thimble punctures across it between middle and cephalic margin, the deep parapsidal furrows, the base of the scutellum and the deep cross-groove before its apex, punctuate or foveolate. A row of long black setæ across the cephalic margin of the pronotum, the latter distinct, transverse, its cephalic margin acute. Propodeum with a long median carina and no others, foveolate at apex of neck and at cephalic mar-

gin between the spiracles, the latter small round, a little separated from the margin; no spiracular sulcus. Abdomen with the petiole wider than long; abdomen ovate, depressed, its second segment occupying somewhat over a third of the surface, its caudal margin a little convex. Marginal vein not twice the length of the long stigmal whose knob is not large; marginal vein much shorter than the submarginal (over a third shorter), the postmarginal intermediate in length between the marginal and stigmal. Head wider than long, truncate at apex but acute at each ventrolateral corner, the clypeus somewhat produced, truncate, nearly twice wider than long. Cheeks shorter than the eyes. Antennæ inserted a short distance from the clypeus, just below the ventral ends of the eyes, 11-jointed with two ring-joints, the short, obliquely truncate, enlarged club but 2-jointed. Antennæ clavate-capitate. First ring-joint very short. Pedicel subequal to funicle 1, which is a little longer than wide; 2 and following on short petioles and widening distad, 2 somewhat wider than long. Mandibles 4-dentate. Scutellum and scutum long. Maxillary palpi 5-jointed.

One female in the U. S. National Museum (A. Koebele).

Habitat, Australia.

Type, Cat. No. 20465, U. S. Nat. Mus., a female on a tag; head, caudal legs, and fore wing on a slide.

SYNONYMS

Pseudanusia Girault equals *Comperiella* Howard. The ovipositor is free.

Cheiloneuroides Girault equals *Diversinervis* Silvestri.

Allomphale Silvestri equals *Secodella* Girault.

Tancostigmoidella Girault equals *Prococophagus* Silvestri.

Idarnomorpha Girault equals *Idarnes* Walker.

Spalangiomorpha Girault equals *Chaetospila* Westwood.

My descriptions are correct but in *Idarnomorpha* the fourth club-joint I think ought not to be counted a true joint.